IN THE
SUPREME COURT OF MISSOURI

No. SC 86441

SOUTHWESTERN BELL TELEPHONE COMPANY,

Respondent,

v.

DIRECTOR OF REVENUE,

Appellant.

On Petition for Review from the
Missouri Administrative Hearing Commission
Hon. Karen A. Winn, Commissioner

BRIEF OF RESPONDENT

BRYAN CAVE LLP
Ann K. Covington, #26619
B. Derek Rose, #44447
One Metropolitan Square
211 North Broadway, Suite 3600
St. Louis, Missouri 63102-2750
Telephone: (314) 259-2000
Facsimile: (314) 259-2020

Edward F. Downey, #28866
221 Bolivar Street, Suite 101
Jefferson City, Missouri 65101
Telephone: (573) 556-6622
Facsimile: (573) 556-6630

Attorneys for Respondent

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Missouri Cases

Missouri Statutes

STATEMENT OF FACTS

1. Introduction

The record in this case is voluminous, consisting of seven days of testimony as well as thousands of pages of documentary evidence, including photos and video. Based upon that record, the Commission rendered 236 detailed Findings of Fact that the Director does not overtly challenge. Instead, the Director proposes to "set out the facts in a somewhat different fashion" than did the Commission (Dir. Br. 11). In so doing, the Director's fourteen page statement of facts ignores many fundamental facts and includes assertions of "fact," particularly relating to intercom systems, that are not in the record, and includes argument (Dir. Br. 12, 13, 15, 16, 19, 22, 23). Therefore, under Rule 84.04(f), Southwestern Bell Telephone Company ("Bell") presents the following statement of facts, with appropriate references to the record and the Commission's Findings of Fact.[1] Bell also includes a brief history of this case.

[1] Citations to the transcript of the original hearing in 2000 are (Tr1.). Citations to the transcript of the hearing on remand are (Tr2.). Citations to exhibits are (Ex.). Citations to the Director's Brief are (Dir. Br.). Citations to the Appendix of the Director's Brief are (App.). Citations to Bell's Appendix to its brief are (Bell App. A.).

2. History of the Case

A. This Court's Decision

The Commission originally conducted a three-day hearing on April 25-27, 2000, during which Bell presented testimony and exhibits regarding the operation of its integrated telephone network and the production of its taxable telephone services. Based upon that record, the Commission, by decision dated July 26, 2001, made 107 Findings of Fact and determined that Bell was not engaged in manufacturing. Bell appealed to this Court. This Court reversed and remanded. *Southwestern Bell Telephone Company v. Director of Revenue*, 78 S.W.3d 763 (Mo. banc 2002) ("*Bell*"). In so doing, this Court noted that Bell's purchases at issue included:

> numerous items of machinery and equipment, including inventories, computers, electronic analog and digital switching devices, circuit equipment, and various other components involved in transmitting and processing information required for telephone communications. *Id*. at 78 S.W.3d 764.

This Court discussed the provision of basic voice telephone service, beginning with a customer's picking up the handset at one end of Bell's network and ending with the receiving customer at the other end of the network:

> When a person picks up a telephone, a dial tone is produced by electrical currents flowing between the telephone and the central office switch. Once the customer inputs the desired number, the central switch analyzes the electrical pulses or tones to determine the proper routing of the call. A separate system, called the SS7 signaling system, sends out a data message, which is used by the receiving switch to determine whether the line is free or busy. The caller then hears either the familiar ring or busy

signal. If the person on the receiving end picks up the telephone, a voice connection is established. The vibrations of a person's voice are converted by the telephone into an analog signal. Depending on the type of switching office, the signal remains analog as it is transmitted or is converted into a digital signal.

An analog signal traveling over a telephone wire loses strength because of the resistance of the wires. The signal, along with any additional noises on the circuit, must be amplified to travel over long distances. If the switching office is analog, the signal is transported across the wire, amplified as necessary and then reconverted into a voice signal for the other listener.

If the switching office is digital, the analog signal is "'sampled" at a very high rate into a digital signal. This signal goes through the system and is converted into a voice signal at the other end. Instead of being a sound wave, a digital signal is transported as a package of data. Because it is digital data that can be regenerated, instead of being amplified, there is no risk of other noises being amplified with the voice data.

The vertical services operate in a similar manner. Various electrical signals and data are transported from one telephone, through the network and received by another telephone. Along the way, the information is manipulated by computers to provide various services, such as call-waiting or Caller ID. *Id.* at 764-65 (footnotes omitted).

This Court described the Director's opposition to Bell's refund claim as follows:

> The Director contends that Bell did not satisfy the three elements common to both [manufacturing exemption] subsections, that exemptions will only be given for (1) machinery and equipment (2) used directly in manufacturing (3) a product that is intended to be sold ultimately for final use or consumption. *Id.* at 766.

This Court discussed its prior precedents addressing the definitions of "manufacturing" and "products" and concluded that Bell was engaged in manufacturing of products it sold:

> The *GTE* Court reasoned that telephone service did not fit comfortably into these definitions. It noted that the human voice was the input into the telephone and that it was not "practically unsuitable for any common use." The Court also reasoned that telephone services failed the second definition because telecommunications did not create a product, but it was instead a service. The only "product," *GTE* reasoned, was the human voice, which has no intrinsic value.
>
> Primarily, this argument is so dependent upon the premise that an intangible product cannot support the exemption, that it falls of its own weight after *IBM*. Moreover, *IBM* also expressly confirmed that "organizing information through computer technology is manufacturing."
>
> Additionally, the *GTE* reasoning was simply incorrect. Although the human voice may not be unsuitable for common use, it is unsuitable for

> communication that must occur over any appreciable distance. It cannot be heard from residence to residence, from office to office, or from town to town. The listener requires that the voice be 'manufactured' into electronic impulses that can be transmitted and reproduced into an understandable replica. The end 'product' is not the same human voice, but a complete reproduction of it, with new value to a listener who could not otherwise hear or understand it. Even *Bridge Data* noted that the *GTE* statement that the same voice comes out as goes in, was a fiction inconsistent with the modern understanding of physics.
>
> Basic telephone service and the various vertical services involved herein are intangible products that are manufactured. Whatever is left of *GTE* after *Bridge Data*, *Concord Publishing*, and *IBM*, is overruled. *Id.* at 767-68 (citations omitted).

This Court remanded this case to the Commission:

> Because the AHC rested its decision on its finding that telephone services were not the manufacturing of a product, Bell's claim requires further fact finding concerning whether the purchases were of "[m]achinery and equipment, and the materials and supplies solely required for the installation or construction of such machinery and equipment," in accordance with the exemption. *Id.* at 768.

B. The Commission Remand Hearing and Decision

On remand, the Commission conducted an additional four-day hearing on October 6-9, 2003. On a purchase-by-purchase basis, Bell presented further testimony regarding the use of each purchase in the telecommunications network and further evidence regarding accounting factors relevant to the remand order. The Director did not present any evidence. William Deere, an electrical engineer with almost 40 years of experience in the telecommunications industry (Tr2. 241), testified for the better part of four days. Mr. Deere was, and is, intimately familiar with the equipment of the Bell telephone network, with how that equipment and the network operate, and with the services created by that network and sold to Bell's customers (Tr1. 264, 438-9). The Director's technical expert witness heard Mr. Deere's testimony during the first phase of trial, but did not testify because the "technical information [was] very correct" (Tr1. 682). The Director did not challenge that evidence or the Commission's findings based upon it. The extensive and technical description of Bell's manufacture of taxable telephone services is, therefore, undisputed (App. A.31-51, ¶¶ 120-236; Ex. 44).

During the remand hearing, Bell revised and lowered its refund claim to $598,944.14 in use tax remitted during the second quarter of 1992 on its purchases at issue ("Purchases") (App. A.29, ¶ 109; Ex. 44). During that three-month period, Bell collected and remitted $11,011,655.48 in Missouri sales tax on approximately $186,000,000 in taxable sales of basic and vertical telephone services (Ex. 3). On remand, the Director conceded all but $242,328.63 of Bell's revised refund claim (App. A.54-55).[2] The Commission viewed those concessions as binding on both the Commission and the Director (App. A.54).

---

[2] The purchases that the Director conceded were in FRC accounts 67C, 117C, 157C, and 457C (microwave equipment, switching machine software, digital data system equipment, and

Based upon the record, which the Commission considered "comprehensive proof" (App. A.58), the Commission rendered 236 specific Findings of Fact on remand (App. A.2-51), concluded that all of Bell's Purchases qualified for the Manufacturing Exemptions, and concluded that Bell was entitled to a refund of use tax in the amount of $598,944.14 on its purchases of equipment during the same quarter where it used its equipment to produce approximately $186,000,000 in taxable sales.

Below is an abbreviated recitation of the factual findings relevant to the resolution of this appeal.

3. Manufacture of Taxable Telephone Services

A. Telephone Network Equipment

In very brief summary, the factual findings below show that Bell's telephone network supplies low voltage electricity in the form of direct current to its customers, takes customers' analog electronic signals created from that electricity, converts those signals to digital electronic signals and/or pulses of light, regularly regenerates those signals into new signals, discards the old signals, converts the signals back to analog signals, creates additional electronic signals/information (for instance ringing signals, dial tone signals, busy signals, message signals, caller identification signals, billing information signals, etc.) and conveys all of those signals and

---

analog loop electronic equipment that conditions signals prior to leaving the central office) (App. A.34, 36, 37, 46). The Director also conceded most of the purchases in FRC accounts 57C, 77C, 257C, 357C, 377C, and 1220.1411 (App. A.55) (central office analog equipment that processes signals prior to leaving the central office, central office switching equipment, digital loop electronic equipment, multiplexing equipment) (App. A.33, 35, 37-8, 41-2).

information to a receiving party, sometimes with the addition of tangible personal property (in the case of certain of Bell's billing products).

The building blocks of the telephone network that perform the above functions are loop facilities, central switching offices, and interoffice trunking facilities, each of which, as generally explained below, has a multitude of equipment that converts, regenerates, or creates electronic signals and information (App. A.2, ¶ 1; Ex. 12, p. 1).

(i) Loop Facilities

Loop facilities consist of equipment, including various signal processing equipment, wires and fiber optic cables, involved in connecting a customer to a central switching office or to another transmission facility (App. A.5-6, ¶¶ 8-9). Feeder facilities and distribution facilities connect customers to a central office (Ex. 13, p. 2).

Wires, cables consisting of many wires, and fiber-optic systems are part of feeder facilities and are used in conjunction with "pair gain devices" (Ex. 13, p. 3). "Pair gain devices" were developed to allow growth on existing feeder cables and to reduce the cost of placing new cables. A pair gain device allows a large number of conversations to be carried on a few pairs of wires. A pair gain device requires an electronic terminal in the central office, a digital line facility, and an electronic terminal in the serving area. A pair gain device allows service of up to 96 customer lines on 10 pairs of copper wires. The actual capacity of each system is determined by the types of services ordered by the customers being served (Ex. 12, p. 4). Pair gain devices convert the analog signal and put it on a carrier frequency. They are called pair gain devices because "you gain a pair off of another pair by doing this" (Tr2. 186). Pair gain devices are grouped together to serve an area known as a Carrier Serving Area ("CSA"). The CSA is a concentration of customer locations that are connected by distribution cables to

the pair gain devices. The pair gain devices are located near the CSA in a weatherproof cabinet, a small building, or an underground vault. All of these locations require a source of commercial power and are provided with batteries for emergencies (Ex. 12, p. 4).

Distribution facilities are the portion of a loop facility located between the feeder facilities and the drop wire at a customer's premises. Distribution facilities are nearly always copper cables and are smaller in size than the cables that are used as feeder cables. Several distribution facilities connect to a single feeder facility, except when a customer has ordered a special service that cannot be provided over copper facilities. Distribution cables are buried or aerial and have a maximum length of 12,000 feet. The size of these cables varies from 25 pairs to 3,600 pairs as needed to serve the customers in the customer serving area (Ex. 13, p. 3).

Digital loop carriers are assemblages of equipment that transform the nature of the signals on the network. The digital loop carrier system converts the analog signals to digital signals, and then places 24 individual signals onto a single 1.544 Megabit per second ("Mb/s") circuit that uses only two pairs of wires between the digital loop carrier central office terminal and the remote terminal (Ex. 12, p. 5). This equipment is located between the central office and the customer's premises. Bell may run a light fiber from the central office to a remote terminal of the digital loop carrier, transmit the signal in a digital format to that point, and then de-multiplex it (break it down) into smaller portions of signals and convert it to an analog signal in order to transmit it to the customer (Tr2. 32, 42). The digital loop carrier uses time division. It takes 24 conversations and puts them into time slots. It samples the voice 125,000 times a second and sends all 24 of those samples down the line and then it starts again. At the other end, it undoes them and puts the voice back together (Tr2. 46).

A central office terminal for the digital loop carriers consists of equipment that is located in the central office. Among the many functions occurring in central office terminals is the conversion of signals from analog to digital and vice versa. A remote terminal performs some of the same functions as the central office terminal, but performs them closer to the customers in order to extend the range of the office and to carry more customers on fewer facilities (Tr2. 39). The remote terminals are located in above-ground, weather-tight cabinets, pre-cast concrete huts, or underground concrete vaults. Each enclosure is equipped with power supplies and batteries and, when necessary, air conditioning (Ex. 12, p. 6). Among the many functions occurring in remote terminals is the conversion of signals from analog to digital and vice versa.

(ii) Switching Equipment

Central switching offices house, among other electronic equipment, "switches." Switches consist of collections of various electronic components performing various processing functions at the central office. While the term "switches" conjures up images of a small light switch, Bell's "switches" are substantial, sophisticated, and expensive electronic devices akin to very large computers. Bell introduced various pictures of this processing equipment (Exs. 45-67) demonstrating "switches" and switch components, referred to as "circuit packs." A switch could occupy as much as two whole floors of a building with thousands of square feet of equipment. Its components may include line modules, trunk modules, the switching network, and a central processor, each of which perform signal and data manipulation functions. Additional components may be added to a switch to increase its service. A switch serves the same type of function as an Internet router. It takes in data, analyzes the data, determines from memory what is to be done with it, and routes it to that

point through the system (Tr2. 58-60). One function of a switch is to convert analog signals to digital signals (Tr2. 61; App. A.5-6, ¶¶ 8-9).

There are presently three generations of switching technology in use to provide service to Bell customers: analog electronic switches, digital electronic switches, and remote switching systems (Ex. 14, p. 5). The switches in this case include analog switches known as ESS (electronic switching system) switches, digital switches, and tandem switches. They all perform signal processing and interconnection functions.

(iii) Central Office Equipment

The central office contains the switching machine that connects one customer's loop facilities to another, or a customer's loop facilities to a trunk to another central office. A trunk unit is a transmission path between two switching machines (Tr1. 525). The central office houses a group of computers that, working together, perform the many functions performed in the central office (Tr2. 54; App. A.5, ¶ 11). The tandem is a type of central office that contains a switching machine that connects interoffice trunks from one office to another. The tandem connects multiple central offices in a geographical area (Tr2. 474-75; Ex. 43; App. A.5, ¶ 12).

The central office also contains the distributing frame that allows any loop facility in the wire center to be associated with any line termination available in the switching machine. In addition, the central office provides the power that operates the various telephones that are connected to Bell's network. Equipment in the central office converts AC power obtained from the local power company to DC power to operate the phone network (App. A.6, ¶ 14).

A central office switching machine's processing equipment is usually comprised of line terminations, or line ports; trunk terminations, or trunk ports; a switching matrix; and a control

system that provides the ability to have multiple features associated with the lines and trunks (Ex. 14, p. 2; App. A.5-6, ¶ 14).

Each digital central office has multiple switch modules. These switch modules contain the line ports and trunk ports that provide access to the switch. Local loops from individual customers are terminated on line ports. Trunks to the other central offices, interexchange carriers, and other providers of telephone service are connected to the trunk ports. These ports provide any necessary analog-to-digital conversion that is needed for the type of service being provided. For example, if a customer is connected to the central office by an analog loop, the line port will convert the signal to a digital format before connecting the customer to the switch. The line port may also convert digital signals from the switch to analog signals for transmission to the customer if the customer is not served by a digital carrier system. The line and trunk ports also transmit signals necessary for call completion, such as off-hook, audible ringing, and power ringing (Ex. 14, p. 3; App. A.6, ¶ 15).

The "time slot interchange" is a switching device that is located in each switch module. It allows the completion of calls between lines and trunks located within the same switch module. It also allows the connection of calls between switch modules (Ex. 14, p. 4). The time division switch serves a dual purpose. It is the primary switching component for the switch. It connects lines and trunks located in different switch modules. It also serves as a communication path between the switch modules and the central processor (Ex. 14, p. 4; App. A.6, ¶¶ 16-17).

Each switch module contains a processor that allows it to perform certain common functions such as the provision of a dial tone and the collection of dialed digits. This process is capable of completing simple calls between ports located in the same switch module, but it

must communicate with the central processor in order to complete calls to another switch module or for the activation of complex features. For example, if a customer line attached to a line port in Switch Module A calls a customer line attached to a line port in Switch Module B, the processor located in Switch Module A will recognize the customer's signal for service, provide a dial tone, collect the dialed digits, and determine that the called line is not located within the calling switching module. The processor will generate a signal on a signal link to the time division switch. The signal switch will provide a connection to the central processor. The central processor will determine the location of the called line and send a signal back through the signal switch to both the calling and the called switch modules that give the proper instructions for completion of the call. The time division multiplexing switch will then connect the voice links from each switch module together.[3] Upon completion of the call, similar signals will be sent to inform all portions of the switch to disconnect the call. Customer-dialed digits that are designed to activate features of the switch will also cause signals to be transmitted from the switch module through the signal switch to the central processor to receive instructions for activation of the feature (Ex. 14,

p. 4; App. A.7, ¶ 18).

In addition to normal call processing functions and feature activation, the central processor provides the input/output ports that allow technician access for new service activation and troubleshooting activities. The main operating programs are also stored in the

---

[3] Multiplexing is interlacing low-speed signals and sending them out as a higher-speed signal. De-multiplexing is the reverse process of breaking the signal down from a large signal to a smaller signal (Tr2. 41).

memory of the central processor. Data related to measured services, and toll calls, are collected by the central processor. Bell employs this information to provide billing services to its customers)(Ex. 14, p. 5).

(iv) Interoffice Trunking Facilities

The interoffice trunking facilities are the assemblages of equipment that enable communication paths between the switching machines. In a town that is served by a single switching machine, all trunks are usually used for access to long-distance carriers or for operator services. In large cities, there are local trunks that are used to connect customers to each other through different central offices in the city. Trunking facilities may be simple copper wires, but they are most often sophisticated electronic carrier systems connected to copper wires or fiber-optic transmission systems (Ex. 12, p. 2).

The simplest form of an interoffice trunking facility is a pair of copper wires. These may be used alone for short distances, usually three to four miles. For greater distances, it is necessary to use a digital carrier system employing repeaters to regenerate digital signals in the cable between the offices (Tr1. 412). The first digital carrier system used in Missouri was the T-1 carrier, which was installed in 1964 as an interoffice trunk facility in the multi-office cities. A T-1 carrier is now used for most trunk facilities. The T-1 system transmits 24 voice channels or one 1.544 Mb/s data channel on two pairs of copper wires (Ex. 12, p. 12). However, even a digital signal deteriorates, so it must be regenerated by a repeater approximately every 6,000 feet, which reformats the signal so the deteriorated signal can be discarded (Tr1. 412-414). The repeaters thus bring the digital signal back to its original quality over and over again (Tr1. 532).

Bell also multiplexes the telephone signals by combinations of sophisticated signal processing equipment. The input into the T-1 multiplexing system is 24 analog signals of 64

Kb/s (kilobits per second) each, which are converted into 24 digital ("DS-0") signals, and then the output is one 1.544 Mb/s ("DS-1") signal (Ex. 24, p. 6). DS-1 is the next level of multiplexing from a DS-0 signal and results in a higher transmission speed (Tr1. 399).

Bell also uses "lightwave guide systems," or fiber-optic systems consisting of several components, each of which is an assemblage of sophisticated electronic equipment. The lightwave guide is an optical fiber made of special glass. This hair-thin fiber provides a low-loss path for the transmission of optical signals. Although light normally travels in a straight line, the fiber is designed to contain the light signal so it can be bent and guided from one location to another. The fibers being used today can transmit a light signal 30 miles without the need for repeaters or regenerators. One pair of fibers is required for each system (Ex. 12, p. 12). An electronic device converts the original electrical signals to light signals and, at the receiving end, converts the light back to electrical signals. Because light has two natural states, on and off, it is a natural transmission system for digital signals that consist of ones and zeroes (Ex. 12, p. 13). In order to place a large number of communication channels on a lightwave guide system, it is necessary to multiplex the original signals together (Ex. 12, p. 13). T-carrier technology is used for the initial stage of multiplexing, and the T-1 digital signals are combined in ever larger amounts before the signals are converted to light signals. At the receiving end, the optical signal must be converted to an electrical signal and then de-multiplexed. Fiber systems can also be used to transmit high-speed data and video signals. These signals must also be converted from electrical to optical signals and require some multiplexing (Ex. 12, p. 13).

A digital cross-connect system allows signals to be exchanged between high-speed circuits without converting them back to analog signals (Tr1. 394-400; Ex. 12, p. 15-17).

Without a digital cross-connect system, the circuits must be de-multiplexed, or brought back down to individual circuits (Tr1. 394). The digital cross-connect system consists of a set of computers 30 to 40 feet long and 8 to 10 feet tall (Tr1. 396).

(v) Signaling System Seven

A separate overlay network of equipment, referred to as the Signaling System Seven ("SS7") Network, allows switching machines to communicate with each other on a path different from the path the basic service communication will follow (Tr1. 300). Prior to the advent of the SS7 Network, all information had to be conveyed over the basic service communication path while the communication took place. Now, the SS7 Network controls the passage of control information between elements of the communications network. The SS7 Network controls the conditions needed to direct and control the setup, administration, and disconnection of circuits for the basic telephone service (Ex. 12, p. 18). The SS7 Network also allows the telephone network to provide many of the vertical services for which Bell makes additional charge (Tr1. 502-503).

Signaling is the communication of control information between the elements of a communications network. Technically speaking, signaling is the generation, transmission, reception, and application of conditions that are needed to direct and control the setup, administration, and disconnection of circuits (Ex. 12, p. 18). It passes on information such as the calling number and called number to another office (Tr2. 64). An SS7 allows additional information to be sent while the customer is talking, or before and after the call (Tr1. 388). The SS7 does not carry the customers' communication signals between offices (Ex. 12, p. 20); it transmits signaling information between switches (Tr1. 402).

The primary elements of the SS7 network are the Signal Transfer Point ("STP"), the signaling links, and the Service Switching Point ("SSP"). The STP is a packet switching device that provides signaling distribution for the network. The SSP is a central office or tandem switching machine that is equipped to process SS7 signals. The signaling links are the transmission paths that connect SSPs to STPs and STPs to other STPs (Ex. 12, p. 19).

B. Basic Service

Basic telephone service consists primarily of communications between two customers on the telephone network through use of the telephone network. Those communications are frequently voice communications, but may include electronic communications between computers, fax machines, and other non-voice means. Bell converts alternating current purchased from an electric utility to direct current that powers the telephone network, including its customers' telephones. Basic telephone service is manufactured by Bell's equipment through a series of conversions of analog electrical signals into digital electrical signals, the regeneration of such digital signals, and/or the conversion of such signals into light pulses, the creation of certain signals (dial tone signals, ring tone signals, busy signals, messages, etc.) by processing equipment and the transmission of those signals (the signals Bell generates to represent the signals provided by customers, and the signals like dial tone, busy, and ringing signals) between various equipment in the network and the customers on the system. There is no transfer of sound on the telephone network (Tr2. 743, 749).

(i) Call Origination

A call is initiated, directed, and terminated by a series of electronic signals that are exchanged by the customer and the telephone network (Ex. 14, p. 8). Speech generates an analog sound generated by air pressure. The signal of a voice as people talk is a transmission of

air pressure waves back and forth between them that impacts the listener's ear and causes it to vibrate (Tr2. 48). A telephone contains a microphone that produces an analog reproduction of the customer's voice. When a customer lifts the telephone receiver, Bell's DC current flows through a pair of wires connecting the customer to the central office switch. The switch recognizes the current flow as a request for service and signals the customer that it is ready to provide service by returning a dial tone. The customer then enters an address in the form of a phone number for the party to be called (Ex. 14, p. 8).

The wires from the customer's premises are connected in the central office to a line card (a particular type of circuit pack or electronic assembly) mounted in one of the line modules (Ex. 43, p.1; Tr2. 45, 53-54). The line card detects the electrical current flow and sends an electronic signal to a processor located in the line group controller ("LGC"). The LGC processor establishes a transmission path from the signaling line card to a tone generator located in the LGC. The tone generator provides a digital electrical dial tone back to the line card. The line card converts the digital signal to an analog signal that can then be converted to sound heard by the caller (Ex. 43, p.1; Tr2. 54-55). The LGC processor also establishes a path from the line card to a tone receiver and decoder. When the calling customer presses a touch-tone button on the telephone set, a tone is sent to the central office and detected by the tone receiver. The tone receiver sends a signal to the LGC processor that dialing has begun. The LGC processor sends a signal to disconnect the tone generator and thereby remove the dial tone from the customer's lines (Ex. 43, p.1-2; Tr2. 55-56). The LGC processor reports to a processor in its line group module, which in turn reports to a central processor. In this manner, the LGC processor sends a signal to the central processor once dialing is completed. The central processor contains memory so that it knows what features the customer has

subscribed to and thus what the customer may do. The central processor uses its routing tables to determine how to handle the call and where to send it. The central processor then establishes a path through the switching network between the two line groups and the two line cards representing the calling customer and the called customer. The digits that the customer dials determine what equipment is placed in service in response (Tr2. 56-57).

An analog electrical signal leaves the phone set in the form of a ragged sine wave. When it gets to the digital loop carrier, the digital loop carrier samples the analog signal. By making very small samples of the signal once every 125,000ths of a second, the digital loop carrier digitizes the sample into an 8-bit code and puts the code in a time slot. Each of the 24 voice channels that is going to be digitized is assigned to one time slot, which is a dedicated path that is always present regardless of whether anybody is speaking (Tr2. 49).

When a customer dials a number, the switch analyzes the digits to determine the proper routing of the call. On a local call, the first three digits indicate the central office switch serving the called customer, and the last four digits indicate the specific customer being called. If the called customer is served from a switch different from that of the calling customer, the routing information will indicate the address of a group of trunks that connect the two switches together. The originating switch sends a data message to the terminating switch using SS7. This message provides the called number, the calling number, and the trunk address for the call (Ex. 14, p. 9). The terminating switch uses the called number to determine the location of the called customer on the switch and checks to see if the line is currently in use.

If the called number is not a working number, the central processor sends a message signal to the originating line module, the switching network, and a trunk module containing a recorded announcement machine to establish a voice path between the calling line and the

announcement machine. The calling customer then hears the appropriate recorded message (Ex. 43, p.2; Tr2. 57). If the terminating line is busy, the central processor sends a signal to the originating line module processor to attach a tone generator to the originating line and provides a busy signal to the calling customer (Ex. 43, p. 2; Tr2. 57; Ex. 14, p. 9). If the terminating line is idle, the central processor sends a signal to the processor in the terminating line module instructing the line module processor to test the terminating line for continuity and then to attach a ringing generator to the line. The ringing generator applies electrical current to the line that causes the bell in the telephone set to ring. At the same time, the central processor instructs the originating line module processor to apply a ringing tone to the calling customer's line to let the calling customer know that the call is being processed (Ex. 43, p. 2; Tr2. 57; Ex. 14, p. 9).

When the called party lifts the telephone receiver, the loop is completed and current flows through the line. A scanner in the terminating line module detects the current flow, and the line module processor sends a signal to the central processor indicating that the circuit is ready to be completed. The central processor sends messages to the switching network, the originating line module, and the terminating line module processors to set up a talking path through the switch. The central processor also sends a message to the originating line module processor to remove the ringing tone, and to the terminating line module processor to remove the ringing generator from the line (Ex. 43, p. 2; Tr2. 57). At this point, conversation may begin and the path through the switch remains stable until one party hangs up, disconnects, or signals for a vertical service to be performed (Ex. 43, p. 2).

The line module processors continue to monitor the status of the lines, and the scanner will detect when current flow ceases due to one or both of the parties hanging up. When this

happens, each line module processor signals the central processor which, in turn, signals each line module processor and the switching network to release all circuits (Ex. 43, p. 2).

(ii) Calls to Other Central Offices

If the dialed telephone number is for a customer served by a switch outside the local calling area, the central processor determines that the call is to be sent to another local central office using the routing tables. The central processor identifies a path from the originating line module through the switching network to a trunk module where trunks to the other central office are terminated (Ex. 43, p. 2-3; Tr2. 63-64). The central processor also connects through the switches' internal fiber-optic network and message switch to an SS7 data link. The SS7 data link is used to pass call information from one switch to another. The central processor formats an SS7 message to the terminating switch that includes the calling telephone number, the called number, and the identification of the trunk that has been assigned to the call (Ex. 43, p.3; Tr2. 64).

Upon receiving the SS7 message, the terminating switch central processor checks the status of the called line and sends a return SS7 message to the originating switch operated by the central processor. If the return SS7 message indicates that the line is busy, the originating switch operated by the central processor applies a busy tone. If the return SS7 message indicates that the line is idle, the originating switch operated by the central processor applies a ringing tone to the calling line. When the terminating line answers the call, the terminating switch operated by the central processor sends an SS7 message to the originating switch operated by the central processor, which establishes the identified path from the originating line module to the trunk to the distant central office, and removes the ringing tone. The line module processors continue to scan the lines for disconnect. If either line hangs up, the central

processor sends an SS7 message to the other switch so that the circuit can be disconnected (Ex. 43, p.3).

(iii) Toll Calls

When the central processor receives the called number from the line module processor and determines that the call is a toll call, it looks in the switch memory associated with the calling line to determine the long distance carrier that has been selected by the customer. This record provides a routing code to the interoffice trunks that terminate on the long distance carrier's switch. The central processor selects an idle trunk and sends an SS7 message to the long distance carrier's switch, which includes the calling number, the called number, and the identification of the trunk to be used. The long distance carrier's switch sends a return SS7 message indicating that it is ready to receive the call (Ex. 43, p. 3).

The central processor also establishes a record in its memory of the call data, including the calling number, the called number, the date, the time of day when the called number answers the call, and the disconnect time for the call. The central processor downloads this information to a Bell accounting computer at least once per day (Ex. 43, pp. 3-4). The line module processor continues to monitor the line status to determine when the calling line hangs up. The long distance carrier's switch monitors the call to determine if the call is disconnected at the called party switch and sends an SS7 signal to the originating switch central processor when the disconnect occurs. When either party disconnects, the central processor issues orders to the line module, trunk module, and switching network processors to release the circuits through the switch (Ex. 43, p. 4).

(iv) Transmission of Analog and Digital Signals

In systems using digital equipment, the analog signal is transmitted on copper wires to a point in the telephone network where it is converted to a digital signal (Ex. 14, p. 14). Analog signals are subject to three natural impairments to transmission: loss, noise, and distortion. As an electrical signal travels the length of a pair of copper wires, it is reduced in strength due to the resistance of the wires. This loss of signal strength is reflected in a reduced volume or loudness of the transmitted voice signal. Therefore, there is a practical limit to the distance that an analog signal can be transmitted without being amplified back up to its original strength. When an analog voice signal is amplified, any noise that may be on the circuit is also amplified. Noise is caused by unwanted electrical signals, and it interferes with the information signal. These unwanted electrical signals may come from a number of sources. They may be generated by power cables near the phone lines or by electric currents in the earth or air, or they may come from other pairs of wires in the same telephone cable. If an analog signal is amplified and the noise is strong, the signal may actually be changed so much that the original information is changed. This is called distortion (Ex. 14, p. 14-15).

Although an analog signal may be transmitted over copper wire, it deteriorates rapidly due to resistance in the wire. Even if the signal is amplified, it is amplified in the deteriorated form. If an analog signal is transmitted long distances, a lot of noise and static are produced (Tr1. 531; Ex. 14, p. 14-15). Digital signals are not subject to the noise that affects analog signals (Ex. A). A digital signal has better quality than an analog signal because the pulse can be regenerated. A digital system can also carry significantly more capacity on the transmission medium. For example, whereas a pair of wires may carry one conversation on an analog circuit, a pair of wires may carry up to 672 conversations on a digital circuit (Tr1. 531-33).

A digital transmission system generates signals made up of a fixed number of pulses of set size. For example, many systems use eight pulses or bits to represent one signal. Each of the eight bits may be on (a pulse is present) or off (a pulse is not present). Because these pulses are electrical signals, there is a loss of signal as the signal travels over a copper wire. However, because the signal has a specific size and shape, it is possible to regenerate the signal rather than amplify the signal. This makes it possible to eliminate the noise and distortion common in an analog system (Ex. 14, p. 15).

The process of converting analog signals to digital signals is called pulse amplitude modulation. First, the high and low frequencies are trimmed off because they are not heard very well anyway (Tr1. 528). Then the analog signals are sampled and coded into a signal, usually an 8-bit signal. When a person talks, the listener may not be listening to every sound that is made, but may still understand what is being said. By sampling an analog voice signal 8,000 times per second, it is possible to transmit and reconstruct those samples so that they sound the same as the original sound (Ex. 14, p. 16-17). The samples are encoded, using an algorithm that creates eight bits of data from each sample (Tr1. 529).

The human ear cannot hear a digital signal as words and phrases (Tr1. 650). Therefore, a digital signal must be converted back into an analog signal (Tr1. 647). The eight bits in each sample are reproduced and spaced apart every 125,000th of a second to regenerate the signal into a new signal that replicates the original signal. It does not contain all of the information of the original signal, but it is a replication of the sound (Tr1. 530).

C. Comparison of Manufacture of Electricity and Telephone Services

Because the Director argued that *UtiliCorp United, Inc. v. Director of Revenue*, 75 S.W.3d 725 (Mo. banc 2001), was relevant, the record on remand addressed key differences between

the manufacture of electricity and the manufacture of telephone service. The Commission made findings of fact in that regard (App. A.30-31). One key difference between the production of telephone service and the production of electricity is that telephone service is an intangible product while electricity is a tangible product (Tr2. 227). Another difference is that telephone service is not complete until the customer receives and uses it, whereas the production of electricity is complete when the electricity exits power generators. Telephone service is a two-way service in which signals are manipulated and created at many places on the network and those signals flow back and forth between parties on the network (Tr2., 227-29). Without the transmission system, a customer could be inside a central office building to place a call, but there would be no way to tell the person at the other end to come to the building to receive the call. By contrast, an electric utility could use electricity that it generates without a transmission system at all. (Tr2. 30-31).

The transmission system in a telephone company is akin to a conveyor belt that moves a signal from one work station to another until it reaches the final stage of production shortly before it is received by the customer. The transmission system of an electric utility is akin to a truck that delivers an already finished product to a customer. (Tr2. 33; App. A.31 ¶ 119).

D. Vertical Services

Vertical services are those services that Bell produces with its equipment and sells to customers as separate services at additional cost to the cost of basic service (Tr1 439-475; Ex. 31). Bell offers the following vertical services to its customers: Bill Plus, Customer Billing Report, Detailed Billing Local Measured Service, CABS Bills on Floppy Disk, Caller ID, Anonymous Call Rejection, Auto Redial, Call Blocker, Call Forwarding, Selective Call

Forwarding, Remote Access to Call Forwarding, Call Return, Call Trace, Call Waiting, Priority Call, Speed Call, and Three Way Calling.

(i) Vertical Services Requiring SS7 Network

For Caller ID, a customer must first have either an adjunct device or a built-in telephone display (Tr2. 476-511; Ex. 14). While other parts of the network complete the telephone call as described above, the originating central office switch looks into its memory and sends, via the SS7 overlay network, both the called number and the calling number. The calling number is placed into a bit of memory associated with the called line. If the called customer has subscribed to Caller ID, the calling number information is transmitted from the terminating central office to the customer's phone between the first and second rings (Tr1. 476-511; Ex. 14).

If the customer has also subscribed to the calling name delivery option of Caller ID, while the terminating central office sets up the call, that terminating central office will launch an additional query with the SS7 overlay network back through the STP to match a name with a calling number. The name is sent back by the SS7 network to the terminating office, which sends the information along with the calling number between the first and second rings as a coded bit of information, which is then displayed on the called customer's display device (Tr1. 476-511; Ex. 14).

The following vertical services are also dependent upon use of the SS7 Network. Anonymous Call Rejection is a vertical service connected with Caller ID. Persons may purposely block the delivery of their caller information for an individual call or for all calls. Anonymous call rejection permits the called customer to reject any calls from persons who block their caller information. When such a call arrives at the central office for a customer

subscribing to Anonymous Call Rejection, it is rerouted to a recorded announcement stating that the called party does not accept anonymous calls. The called party's phone does not ring when such calls are rerouted (Tr1. 465-470). Auto Redial is a vertical service that permits a caller when receiving a busy signal to hang up and have the telephone network continue to monitor the called number. When the called number becomes idle, the network rings the calling and the called number without requiring the customer to redial the called number (Tr1. 484). Call Blocker is a vertical service that allows the customer to create a list of numbers from which the customer does not wish to receive calls. Any calls from a number subject to Call Blocker are rerouted to an announcement that the call has been blocked. The called party's phone does not ring when such calls are rerouted (Tr1. 484-485). Call Return is a vertical service that allows the customer to have the telephone network automatically call the last number that called the customer's number (Tr1. 487). Call Trace is a vertical service designed for cases in which the customer is receiving harassing phone calls. When the customer receives one of these calls, the customer may activate a code that records and prints the calling number at the telephone company's premises. The information is then given to law enforcement authorities (Tr1. 488). Priority Call is a vertical service that allows the customer to assign a distinctive ringing signal to certain incoming calls. The customer is assigned memory in the switching machine in which the customer may input numbers for which the customer desires distinctive rings. The network then uses the SS7 network to identify when these specific numbers are the calling numbers and gives the distinctive ring (Tr1. 488-489).

Because Caller ID, Anonymous Call Rejection, Auto Redial, Call Blocker, Call Return, Call Trace and Priority Call all are dependent upon the network switches knowing the calling

telephone number, none of these services could be provided without the SS7 overlay network (Tr1. 502, 626-655).

(ii) Vertical Services Using Switching Equipment Memory

The following vertical services are produced with the use of memory in the telephone switching equipment. Call Forwarding is a vertical service that allows the customer to have calls that are originally directed to the customer's phone number automatically rerouted to another phone number. The customer inputs the phone number of the premise to which incoming calls will be rerouted from the customer's ordinary premises (Tr1. 485-486). Selective Call Forwarding is a vertical service that is a variation of Call Forwarding in which the customer directs that calls only from certain calling numbers be automatically rerouted to another phone number. No other calls will be rerouted from the customer's ordinary premises (Tr1. 486, 503). Remote Access to Call Forwarding is a vertical service used in conjunction with Call Forwarding that allows the customer to activate it from a remote location. The most common use of Remote Access to Call Forwarding occurs when the customer is already at the premise where the customer desires incoming calls to be forwarded (Tr1. 487). Call Waiting is a vertical service that allows the customer to be alerted by an audible tone of an incoming call when the customer is on another call. The customer then has the option of placing the original call on hold by pressing the switch hook and going to the incoming call. The customer then can go back and forth between both calls (Tr1. 488). Speed Call is a vertical service that allows the customer to create in the memory of the central office switch and store therein up to 32 telephone numbers that can be called using an abbreviated one or two digit code (Tr1. 489-490). Three-Way Calling is a vertical service that allows the customer to create a conference call. The customer connects with one person and then presses the switch hook to receive a second dial tone. The customer then connects with the other person and presses the switch hook to connect all three parties (Tr1. 490).

(iii) Vertical Billing Services

Bell's billing services are services for which customers agree to pay an extra charge. The billing information that the customer pays for and receives, is in addition to the standard billing information that all customers receive for no additional charge. Using its computers and other data processing equipment, Bell provides its customers with information in addition to the normal billing information customers receive as part of their bills for basic service. The customers pay extra for the billing service because they desire additional information about their use of telephone service. For instance, a large company incurring substantial expense for phone service may want additional information about phone usage so that it can allocate costs among various departments of the company. Bill Plus is a vertical service consisting of two parts. The first entails the collection of data from Bell's billing systems regarding the equipment, hardware and services a customer purchases as well as data from the system recording all calls charged to a customer. The data is collected and put on a disk (floppy or CD) and provided to the customer on a monthly basis. The second part of Bill Plus is specialized computer software that can be used on the customer's own computer to manipulate the data, including printing various graphs and reports, that allow the customer to analyze its bill in a more detailed form than Bell's regular bill (Tr1. 448-449).

Customer Billing Report is a vertical service similar to Bill Plus. Customer Billing Report is run on Bell's, rather than the customer's, computer. The customer requests that its bill be analyzed in certain formats by Bell's computers and Bell provides the information in this format (Tr1. 449-450). CABS Bills on Floppy Disk is a vertical service that puts interchange carrier bills on floppy disks (Tr1. 455). Detailed Billing for Local Measured Service is a vertical service that provides billing information to customers whose service includes unlimited

incoming calls but a limited number of outgoing calls at a flat monthly rate. All additional outgoing calls carry a charge and the Detailed Billing service identifies who was called and how much extra was billed for each such call (Tr1. 450-451).

E. Pay Telephone Equipment

Bell also uses Machinery & Equipment in its Pay Telephone Exchange Access Service ("PTEAS"). PTEAS is a telecommunications service utilizing any coin, coinless, credit card reader or cordless instrument that can be used by the members of the general public, or business patrons, employees or visitors of the premises where pay telephone service is installed, provided that the user pays for local or toll calls from such instrument on a per call basis. Telephones located in a hotel or motel room are not considered PTEAS (Ex. 15; Tr1. 640). Bell's refund claim included $10,174.76 in tax on pay telephone components. Of that amount, $6.32 related to signage and approximately $240 related to shelving (Ex. 44, FRC 188C, page 3 of 3, lines 83-96, column G).

F. Capitalization and Useful Life of Purchases

The Commission made detailed findings of fact regarding the useful life of the equipment at issue, its capitalization, and the number of production cycles afforded by the equipment (App. A.31-51, ¶¶ 120-236, A.58). All of the purchases at issue were capitalized, benefited thousands of production cycles and had useful lives of over one year. *Id*.

STATEMENT OF THE ISSUES

In *Southwestern Bell Telephone Company v. Director of Revenue*, 78 S.W.3d 763 (Mo. banc 2002), this Court held that Bell was engaged in the manufacture of telephone service. This Court remanded the case to the Administrative Hearing Commission to determine whether Bell's Purchases constituted machinery and equipment directly used in manufacturing telephone service to qualify for the Manufacturing Exemptions. In *Lincoln Industrial, Inc. v. Director of Revenue*, 51 S.W.3d 462 (Mo. banc 2001), this Court held that "equipment" is defined as the fixed assets of a business that are capitalized for business and accounting purchases, and that is used to benefit multiple production cycles. In *Floyd Charcoal Company, Inc. v. Director of Revenue*, 599 S.W.2d 173 (Mo. 1980), this Court held that all equipment used in a harmonious and synchronized system to manufacture products is "used directly" in manufacturing within the meaning of the Manufacturing Exemptions. Bell presented evidence before the Commission that all of its Purchases were capitalized for business and accounting purposes, that the shortest useful life for any Purchase was one year, and that the Purchases are used "for the purpose of completing thousands and thousands of calls" (App. A.26, ¶ 96). Bell also presented evidence that Bell's telecommunications network is an integrated, mutli-purpose, mixed use network capable of transmitting voice, data, and video information on a local and intrastate basis, and for interstate and intrastate access to long distance carriers. The Director presented no evidence at the four-day hearing. Do Bell's Purchases qualify for the Manufacturing Exemption?

STANDARD OF REVIEW

The decision of the Commission shall be upheld unless: (1) it is not authorized by law; (2) it is not supported by competent and substantial evidence upon the whole record; (3) a mandatory procedural safeguard was violated; or (4) it is clearly contrary to the Legislature's reasonable expectations. Section 621.193; *Concord Publishing House, Inc. v. Director of Revenue*, 916 S.W.2d 186 (Mo. banc 1996). This Court's review of the law is *de novo*. *Zip Mail Services, Inc. v. Director of Revenue*, 16 S.W.3d 588, 590 (Mo. banc 2000).

A previous holding is the law of the case, precluding re-litigation of issues on remand and subsequent appeal. The decision of a court is the law of the case for all points presented and decided, as well as all matters that arose before the first adjudication and might have been raised but were not. *Williams v. Kimes*, 25 S.W.3d 150, 153-4 (Mo. banc 2000).

POINT RELIED ON

THE COMMISSION DID NOT ERR IN CONCLUDING THAT THE MANUFACTURING EXEMPTIONS APPLY TO BELL'S PURCHASES BECAUSE, UNDER SECTION 621.189, THAT DECISION IS SUPPORTED BY COMPETENT AND SUBSTANTIAL EVIDENCE ON THE RECORD, IS AUTHORIZED BY LAW, IS REQUIRED BY THE LAW OF THIS CASE, AND IS ENTIRELY CONSISTENT WITH THE REASONABLE EXPECTATIONS OF THE MISSOURI GENERAL ASSEMBLY.

Southwestern Bell Telephone Company v. Director of Revenue, 78 S.W.3d 763 (Mo. banc 2002);

Concord Publishing House v. Director of Revenue, 916 S.W.2d 186, 190 (Mo. banc 1996);

Williams v. Kimes, 25 S.W.3d 150, 153-4 (Mo. banc 2000).

.

ARGUMENT

THE COMMISSION DID NOT ERR IN CONCLUDING THAT THE MANUFACTURING EXEMPTIONS APPLY TO BELL'S PURCHASES BECAUSE, UNDER SECTION 621.189, THAT DECISION IS SUPPORTED BY COMPETENT AND SUBSTANTIAL EVIDENCE ON THE RECORD, IS AUTHORIZED BY LAW, IS REQUIRED BY THE LAW OF THIS CASE, AND IS ENTIRELY CONSISTENT WITH THE REASONABLE EXPECTATIONS OF THE MISSOURI GENERAL ASSEMBLY.

1. Introduction

The sole issue before the Court is whether Bell's Purchases, in the second quarter of 1992, of machinery and equipment (and installation and construction materials and supplies) used to manufacture nearly $186 million[4] in taxable telephone services during the same period qualify for the exemptions set forth in sections 144.030.2(4) and 144.030.2(5) ("Manufacturing Exemptions").[5]

---

[4] Exhibit 3 consists of sales tax returns showing that Bell's taxable sales in the second quarter of 1992 were approximately $186 million.

[5] All statutory citations are, unless otherwise indicated, to the 1992 Supplement to the Revised Statutes of Missouri. The Director cites, and included in the Appendix to her brief, a later version of the Manufacturing Exemptions that did not apply in 1992. The applicable versions of the Manufacturing Exemptions are attached as Bell. App. 1. Section 144.030.2(4) required a design or product change, although that element is not at issue in this appeal.

This case is before this Court for the second time. In *Southwestern Bell Telephone Company v. Director of Revenue*, 78 S.W.3d 763 (Mo. banc 2002) ("*Bell*") this Court unanimously concluded that "telephone services constitute the 'manufacturing' of 'products' for purposes of section 144.030.2, RSMo Supp 1992" and that "[b]asic telephone service and the various vertical services involved herein are intangible products that are manufactured." This Court's decision to remand to the Administrative Hearing Commission ("Commission") was limited:

> Because the AHC rested its decision on its finding that telephone services were not the manufacturing of a product, Bell's claim requires further fact finding concerning whether the purchases were of "[m]achinery and equipment, and the materials and supplies solely required for the installation or construction of such machinery and equipment," in accordance with the exemption. *Id.* at 768.

On remand, Bell presented "comprehensive proof" (App. A.58), by way of four days of testimony and a multitude of additional exhibits, that the Purchases constituted "machinery and equipment" and qualifying materials and supplies, and that Bell used them directly to manufacture basic and vertical telephone services. Based upon that substantial record, and within the scope of this Court's remand, the Commission concluded that all of Bell's Purchases constituted "[m]achinery and equipment, and the materials and supplies solely required for the installation or construction of such machinery and equipment," in accordance with the Manufacturing Exemptions. In that regard, the Commission found that Bell charged the purchases to capital accounts and depreciated, rather than expensed, them. The Purchases contributed to multiple processing cycles over time and were used to complete thousands and thousands of calls. The Commission decided, therefore, that the Purchases were machinery and

equipment, or qualifying materials and supplies (App. A.58). The Director's brief does not challenge the Commission's conclusion in this regard or any of the factual findings that support it.[6] Consequently, Bell has satisfied the only element remaining on remand. This Court should affirm the Commission's decision.

The Director proffers an array of arguments. Each argument is either irrelevant to the issue before the Court after its remand or constitutes an attempt to re-litigate this Court's decision in the first instance. Those that attempt re-litigation are governed by the "law of the case," a doctrine that "governs successive appeals involving substantially the same issues and facts." *Williams v. Kimes*, 25 S.W.3d 150, 153 (Mo. banc 2000) ("A previous ruling is the law of the case, precluding re-litigation of issues on remand and subsequent appeal." "The decision of a court is the law of the case for all points presented and decided, as well as any matters that arose before the first adjudication and might have been raised but were not.") *Id*. (citations omitted).

---

[6] *See* Finding of Fact 120 in general (App. A.32). There are also specific findings of fact regarding the useful life of equipment under each of the Commission's discussions of equipment by FRC account (for instance Finding 122 for Account 4C) (App. A.32).

In *Bell*, this Court described the Director's opposition to Bell's refund claim as follows:

> The Director contends that Bell did not satisfy the three elements common to both [manufacturing exemption] subsections, that exemptions will only be given for (1) machinery and equipment (2) used directly in manufacturing (3) a product that is intended to be sold ultimately for final use or consumption. *Id.* at 766.

This Court responded, "Basic telephone service and the various vertical services involved herein are intangible products that are manufactured." *Id.* at 768. This is the law of the case, to be adhered to absent a mistake, manifest injustice or intervening change of law. *Williams v. Kines*, 25 S.W.3d at 154. The *Bell* opinion creates no manifest injustice since the purpose of the Manufacturing Exemptions is to encourage the creation of taxable products, and there is no dispute that through Bell's network it created approximately $186M in taxable services during the quarter at issue in this case (Ex. 3). Likewise, there has been no intervening change in the law. Indeed, the sales tax exemption statute has been considered twice by the General Assembly since this Court decided *Bell*, and the Manufacturing Exemptions remain unchanged.[7] The Director's disagreement with the *Bell* decision is no basis for ignoring it.

---

[7] *See* L.2003, H.B. No. 600 and S.B. No. 11; and L. 2004, H.B. Nos. 795, 972, 1128, and 1161 and H.B. 1182.

2. Bell's Purchases Satisfy Every Element of the Manufacturing Exemptions

In *Concord Publishing House v. Director of Revenue*, 916 S.W.2d 186, 190 (Mo. banc 1996), this Court distilled the elements of the Manufacturing Exemptions set forth by Sections 144.030.2(4) and 144.030.2(5) as follows:

> Neither sales nor use tax is due on machinery and equipment (1) used directly for (2) manufacturing (3) a product which is intended to be sold ultimately for final use or consumption (4) if the machinery or equipment was purchased (a) to replace equipment by reason of design or product changes or (b) to expand existing manufacturing.

Many of these elements have already been conclusively decided by this Court when it determined that Bell is engaged in manufacturing products that are intended to be sold ultimately for final use or consumption. *Bell*, 78 S.W.3d at 767-68 ("Basic telephone service and the various vertical services involved herein are intangible products that are manufactured." (citations omitted)). The Director did not and does not challenge the Commission's factual finding that the Purchases were for expansion or for a product or design changes or that the Purchases are of machinery or equipment or qualifying materials and supplies.

The Director asserts that the Purchases were not "used directly" in the manufacture of Bell's products. The undisputed facts in the record demonstrate that Bell met the "used directly" element, just as the Commission determined (App. A.60-70).

In *Floyd Charcoal Company v. Director of Revenue*, 599 S.W.2d 173 (Mo. 1980), this Court adopted the "integrated plant" concept for the Manufacturing Exemptions. In *Floyd*, the Director argued that the "used directly" language of the Manufacturing Exemptions

demonstrates an intention to apply the Manufacturing Exemptions only to devices that produce a change in the composition of raw materials, and, further, that the test to be employed was whether the operation could be carried on without the devices in question. *Id.* at 178. This Court rejected that contention, concluding that purchases are "directly used" in manufacturing if they constitute an integral part of the manufacturing process based upon the facts and circumstances of the particular business operation. Thus, this Court concluded that Floyd Charcoal's equipment used to weigh and sack charcoal briquettes qualified for the Manufacturing Exemptions. *See also Noranda Aluminum, Inc. v. Department of Revenue*, 599 S.W.2d 1 (Mo. 1980) (holding that cranes and conveyor systems moving the unfinished product through production, and quality control laboratory equipment (located in a separate building from production), were used directly to manufacture aluminum); *Concord Publishing House v. Director of Revenue*, 916 S.W.2d 186 (Mo. banc 1996) (holding that reporters' laptop computers were used directly in the manufacture of newspapers).

The Commission correctly applied the law to this case in deciding that all of the Purchases were used directly in manufacturing Bell's products: taxable telephone services. Bell's basic voice telephone service is not complete until a replicated human voice can be heard by the listener. *Bell*, 78 S.W.3d at 767. None of the following is of any value until the customer receives the service: the alteration and reproduction of analog signals, the creation of dial tone signals, ringing signals, busy signals, message signals, and all of information and signals that constitute vertical services. Transformations of signals occur at various stages of production in the telephone network and the entire telephone system is necessary to create telephone services (App. A.67). The facts are undisputed and demonstrate that Bell's telecommunications

network is an integrated, multi-purpose mixed use network. Each portion of the network is essential to Bell's manufacture of its products (Tr2. 30-31).

This Court should affirm the Commission's determination that all of Bell's purchases qualify for the Manufacturing Exemptions.

3. The Director's Arguments

A. Manufacturing of Telephone Services Is Not Limited to the Handset

In her first point on appeal (Dir. Br. 51-59), the Director asserts that practically none of Bell's equipment manufactures telephone services. Manufacturing, she says, is limited to the conversion of sound to analog electric impulses and the subsequent conversion of analog electric impulses back to sound. Her argument is mistaken in at least three respects. First, she ignores this Court's description of Bell's manufacturing process. Second, the Director's "Dixie cup and string" characterization of telecommunications is contrary to the record. Third, the Director did not make this argument to the Commission, and it is contrary to her concession, recognized by the Commission, of approximately sixty percent of Bell's refund claim.

The Director seeks support in the following language in *Bell*, where this Court distanced itself from *GTE Automatic Electric v. Director of Revenue*, 780 S.W.2d 49 (Mo. banc 1989), by explaining that the human voice was:

> unsuitable for communication that must occur over any appreciable distance…. The listener requires that the voice be "manufactured" into electronic impulses that can be transmitted and reproduced into an understandable replica. The end "product" is not the same human voice,

> but a complete reproduction of it, with new value to a listener who could not otherwise hear or understand it. *Id.* at 767.

From that language, the Director asks this Court to conclude that "real manufacturing" occurs only in the handset (Dir. Br. 53).

The Director's contention ignores not only the substantial record, but also this Court's own description of the manufacture of basic and vertical telephone services. Given the voluminous record in *Bell*, this Court's overview of the "mechanics of basic telephone service" was understandably and necessarily "brief" and "simplistic[.]" There is no question, however, that this Court understood that manufacturing, necessarily, is not limited to the handset:

> When a person picks up a telephone, a dial tone is produced by electric currents flowing between the telephone and the central office switch. Once the customer inputs the desired number, the central switch analyzes the electrical pulses or tones to determine the proper routing of the call. A separate system, called the SS7 signaling system, sends out a data message, which is used by the receiving switch to determine whether the line is free or busy. The caller then hears either the familiar ring or busy signal. If the person on the receiving end picks up the telephone, a voice connection is established. The vibrations of a person's voice are converted by the telephone into an analog signal. Depending on the type of switching office, the signal remains analog as it is transmitted or is converted into a digital signal. (citations omitted). *Id.* at 764.

This Court also understood the record on the creation of vertical services:

> The vertical services operate in a similar manner. Various electrical signals and data are transported from one telephone, through the network and received by another telephone. Along the way, the information is manipulated by computers to provide various services, such as call-waiting and Caller ID. *Id.* at 765.

Nonetheless, the Director argues that "basic telephone service" is merely a "conversion of voice into electronic impulses, and the corresponding conversion of electronic impulses into a reproduction of voice" (Dir. Br. 47-50). Taken to its logical conclusion, the Director's position would be that this Court's discussion of the manufacture of dial tone signals, busy signals, ring tone signals, digital electric signals replicating analog signals and vertical service information was irrelevant to its own decision, and that this Court's remand was limited to fact finding whether the handsets constitute exempt machinery and equipment. That flawed conclusion speaks for itself.

Additionally, the Director ignores the Commission's findings of fact describing the manufacture of basic and vertical telephone services. *See, e.g.*, Findings of Fact: 5, 10, 45, 73, 74 (conversion of analog signals to digital signals); 14 (conversion of alternating current to direct current since the network operates on direct current); 18, 49, 51, 52 (creates dial tone); 19, 67 (manipulates information for taxable "billing services"); 26, 118 (repeaters that regenerate digital signals); 30 (conversion of electric signals into light pulses); 57 (generate recorded messages); 58 (generates busy signal); 59 (generates ringing signals); 147 (directory assistance service); 153 (pay phone service); and 167 (emergency 911 service) (App. A.2-51). The Director's argument is also contrary to numerous findings of fact in the Commission's initial decision: 79-91 (describing vertical services that are generated by Bell's equipment) (L.F. 31-

33). Therefore, as the record reflects, the "real manufacturing" of telephone service encompasses much more than the transformations of sound to electric impulses and electric impulses back to sound.

As noted above, the Commission applied the integrated plant doctrine to Bell's network (Dir. Br. 53-59). The Director lodges a two-fold challenge: (1) the manufactured product is complete when the handset converts the voice to an electronic signal or converts the electronic signal to voice; and (2) this Court has never found that two or more unrelated entities (the customer and Bell) can jointly manufacture a product. The arguments fail for a number of reasons. The first prong of her argument is, once again, contrary to the record and this Court's discussion of it. The second prong of her argument has no support in the record and, in addition, is based upon an incorrect statement of the law.

The Director cites *West Lake Quarry & Material Company, Inc. v. Schaffner,* 451 S.W.2d 140 (Mo. 1970); *House of Lloyd v. Director of Revenue,* 824 S.W.2d 914 (Mo. banc 1992), and *UtiliCorp United, Inc. v. Director of Revenue,* 75 S.W.3d 725 (Mo. banc 2001) for the proposition that once the manufactured product is complete, the manufacturing has ended (Dir. Br. 54). In *West Lake Quarry*, this Court concluded that material handling equipment that loaded ***the completed product*** (rock) onto customers trucks was not manufacturing equipment. In *House of Lloyd*, this Court determined that the merchandise items (collectibles) ***were complete*** before they were subsequently sorted for shipment to customers. In *UtiliCorp,* this Court concluded that electricity was a ***completed product*** when it left power generators located in the power plant, and denied the exemption for equipment that later transformed the power. *Id.* at 728, n.6 ("[e]lectricity can be touched, and when a person does so and thereby completes an electric circuit, it may be the last earthly sensation he or she feels."; *see also* Section 144.605(11) defining

tangible personal property to include "items" within Section 144.020.1(3) (including "electricity or electrical current"). In all of these cases, the product was tangible personal property, and the equipment at issue in those cases dealt with an already completed product.

The Director argues that the Commission's decision "threatened" the "bright line" set forth by these cases (Dir. Br. 54), and that this Court "should refuse to follow *Floyd Charcoal* to the extent [that] the Court there crossed that bright line" (Dir. Br. 55). The Commission's decision threatens nothing. As this Court has already noted, Bell's product is intangible telephone service. As such, manufacturing is not complete when a handset converts sound into an electronic signal. *Bell*, 78 S.W.3d at 764-65. Even if this Court's decision in this regard were unclear (it is not), the plain language of Section 144.020.1(4) imposes the tax on telephone service, and describes the service to expressly include the "transmission of messages and conversations[.]"

The Director also claims that the Commission's decision "erased" the integrated plant's supposed "bright line" "boundaries of ownership and control" (Dir. Br. 54-59). The Director cites *Concord Publishing House, Inc. v. Director of Revenue*, 916 S.W.2d 186 (Mo. banc 1996) and *DST Systems, Inc. v. Director of Revenue*, 43 S.W.3d 799 (Mo. banc 2001). Neither case supports the Director's contention. In fact, this Court's analysis in *Concord Publishing* appears to be at odds with the Director's position.

In *Concord Publishing*, 916 S.W.2d at 188-89, one company, Cape, used a "tiling" or overlaying process to prepare a commercial newspaper for printing. Cape entered text into computers and printed off laser printers. Cape then manually arranged the text on a sample page, and took a photograph of it to create a negative. Next, color photographs were processed manually by aligning separate negatives of the photo for each of the four basic

colors. Cape then send the negatives to a second company, Concord, whose presses used the negatives to print the newspapers sold to the public. The Director argued that the Manufacturing Exemptions could not apply to Cape's computers because Concord's presses printed the newspapers. This Court rejected that argument, relying upon *Central Paving Company v. Idaho Tax Commission*, 879 P.2d 1107 (Idaho 1994). In *Central Paving*, the Idaho court held that a rock crushing machine owned by one company and used to crush another company's rock for the second company's use in manufacturing was tax exempt. This Court stated:

> If the statute's purpose is to exempt materials and equipment used in the manufacture of items ultimately sold at retail then it makes no difference whether the manufacturing process is contracted out to various parties who never obtain title to or ownership of the product being manufactured and items ultimately sold. *Concord Publishing*, 916 S.W.2d at 192, *quoting Central Paving*, 879 P.2d at 1110.

This Court continued:

> The negative was useless without the final step of printing, and the newspaper likewise could not have been printed without the negative. The operations, even by separate corporate entities, were "integrated and synchronized" to the single purpose of producing and selling [the newspaper].

Id. Consequently, this Court held that the separation of the entities did not alter the qualification for the Manufacturing Exemptions. Nowhere in *Concord* did this Court require that the "separate corporate entities" be related. Nor can the requirement be found in *DST*. In fact, common ownership is irrelevant to whether the process is "integrated and synchronized." While

common ownership may be a factor in demonstrating such integration, this Court never stated or even suggested that common ownership was necessary to its holding.

Furthermore, the Director's argument requiring common ownership on the facts of this case defies common sense. Before deregulation, Bell owned the handset. Under the Director's argument, if Bell continued to own the handset she would concede that at least sixty percent of Bell's refund qualifies for the exemption.[8] Only because the customer now owns the handset, the Director's logic goes, does the Director object to the exemption—the entirety of Bell's integrated telecommunications network is transformed into a network in which each and every item of equipment is disqualified from exemption. This metamorphosis is without support in the language of the statutes and this Court's construction of them. It also stands in disregard of the dual purposes of the Manufacturing Exemptions of generating taxable sales and the avoidance of pyramiding of sales tax on equipment used to manufacture taxable products.

In sum, the facts do not support the Director's argument that the only equipment making the conversions or manipulations of signals that are a part of taxable telephone service is the telephone handset. Furthermore, the Commission crossed no integrated plant "bright lines," and the Director's legal argument in this regard is merely an invitation to this Court to

---

[8] Before the Commission, the Director conceded that at least sixty percent of Bell's Purchases qualified for the Manufacturing Exemptions (App. A. 54-55). On appeal, the Director disavows her concession, presenting an issue not presented to the Commission.

effectively overrule *Floyd Charcoal* and all of the cases following it. This Court should reject the Director's invitation to do so.[9]

B. Bell's Equipment Manufactures Vertical Services

The Director acknowledges (Dir Br. 63) that this Court has already held that "the various vertical services involved herein are intangible products that are manufactured[.]" *Bell*, 78 S.W.3d at 768. In effect, however, she moves for rehearing of *Bell*, claiming that this Court's "rationale" did not support the Court's holding. She admits that this Court was correct about call waiting and caller ID (Dir. Br. 62-63), but argues that billing services, call forwarding service, three-way calling service, priority call service, call blocker service, and call trace service do not create a separate signal sent to the customer (Dir. Br. 62-64). She also asserts that billing services are not manufactured because "those compilations" do not have "independent value" to customers (Dir. Br. 64).

---

[9] The Director appears to rely on *Branson Properties USA, L.P. v. Director of Revenue*, 110 S.W.3d 824, 827 (Mo. banc 2003) for the proposition that manufacturing requires "an output with a separate and distinct use, identity or value" from the product inputs (Dir. Br. 38). This Court in fact distinguished *Branson* from *Bell*, and from *Bridge Data Co. v. Director of Revenue*, 794 S.W.2d 204 (Mo. banc 1990), *International Business Machines v. Director of Revenue*, 958 S.W.2d 554 (Mo. banc 1997) and *DST*. In all of those cases, this Court concluded that the taxpayers transformed an input consisting of signals, data and information into an output consisting of new signals, data and information that had a separate and distinct use, identity and value. In *Branson*, however, this Court concluded that the taxpayer did not transform anything because the inputs were not significantly changed.

First, as to the billing services, the facts do not support the Director even if she were correct on the law. As the Director concedes (Dir. Br. 64), the billing services involve the manipulation of information conveyed to customers electronically, on paper, or on disk or CD, as the Director concedes (Dir. Br. 64). Specifically, the billing services involve compilations of information in a format that the customers desire or in a format that the customers can analyze on their computers. The independent value to the customers is obvious given the undisputed fact that Bell charges, and its customers pay, a separate additional charge for Bell to provide this information in the desired format to those customers (Tr1. 446-455).

With respect to several other vertical services, the Director is wrong when she states that no signals are sent to the customers subscribing to the service. For instance, with respect to three-way calling service, customers receive a complete additional signal delivered to the customer (Ex. 11). With respect to priority call service, customers receive different ringing signals so that they know by the sound of the ringer who is calling (Ex. 11). With respect to call forwarding service, all of the telephone signals that the customers pay for (the communication signals, caller ID signals, etc.) are forwarded to an alternate address that the customer designates (Ex. 11).

As for call blocker service, no separate signal is sent to the subscribing customer; because the customer has subscribed to the service, Bell sends separate signals to callers of that customer notifying them that the customer is not accepting their calls (Ex. 11). Similarly, Bell sends no separate signals to the customer who subscribes to call trace service, but does send separate signals to law enforcement agencies (Ex. 11). Bell manufactures taxable services purchased by those customers.

The Director does not cite any statute or case to support her argument that such vertical services are not "products." Clearly they are, because they are subject to sales tax. *Bell*, 78 S.W.3d at 768; *International Business Machine Corporation v. Director of Revenue*, 958 S.W.2d 554 (Mo. banc 1997); *see also* Section 144.010.1(14), RSMo 2000, expanding *International Business Machines* so that a manufactured "product" not only includes services taxable in Missouri, but services taxable "in any other state[.]"

Bell uses its integrated telecommunications network to manufacture the vertical services upon which it collects substantial sales tax. Bell's Purchases are within both the language and purpose of the Manufacturing Exemptions. This Court should reject the Director's attempt to impose restrictions that fall outside of both the statutory language of the Manufacturing Exemptions and the purpose underlying the Exemptions.

C. All of Bell's Purchases Constitute Part of Its Integrated Plant

In Point D of her argument (Dir. Br. 65-71), more broadly than in her Point Relied On, the Director challenges equipment that is part of Bell's inter-office trunking facilities that interconnect central offices. The Director cites *UtiliCorp United, Inc. v. Director of Revenue*, 75 S.W.3d 725 (Mo. banc 2001), as she did during the oral argument of *Bell*, for the proposition that equipment that moves a completed product does not qualify for the Manufacturing Exemptions. *UtiliCorp* is inapposite because Bell's taxable telephone service is not complete prior to signals traveling over the inter-office trunking facilities, and because Bell's product is a taxable service that expressly includes "transmission."

In *UtiliCorp*, this Court concluded that electricity was tangible personal property and that its manufacture was complete when it left the power generator:

> The product—electricity—may have its voltage increased, and thereby its amperage reduced, for transmission across distances. And the voltage may be reduced and its amperage thereby increased near the customer's meter to deliver electricity at a voltage suitable for the customer's needs. ***But the essential product***, and the total electric power expressed in watts, ***remains fundamentally unchanged from the time and place the electricity was generated***.[10] *Id.* at 728-29.

Consequently, this Court held that the equipment at issue (primarily voltage transformers) was not directly used in manufacturing because the product was already complete before the electricity reached the equipment. *Id.*

On its facts, this case is not *UtiliCorp*. The inter office trunking facilities do not carry an already completed product. They connect central offices where the large switching machines are located. Telephone signals and information must still travel through those offices and are converted and regenerated many times before customers receive those signals and that information (App. A.9-15). As the Commission recognized, "the entire telephone system is necessary to provide the service of connecting the caller to the other party, and that service is not complete until that connection is made and the signals transmitted back and forth during the conversation" (Dir. App. A.67). Without the cables and wiring, there would be no service, no charge for the same, and no sales tax collected on those charges (App. A.30-31, ¶¶ 112-119). The Commission also found that "[t]he transmission system in a telephone company is akin to a conveyor belt that moves a signal from one work station to another until it reaches its

---

[10] Emphasis added here and throughout unless otherwise noted.

final stage of production when it reaches the customer. The transmission system of an electric utility is akin to a truck that delivers a finished [tangible] product to a customer" (App. A.31, ¶ 119).

UtiliCorp is also distinguishable under the law. Section 144.020.1(3) imposes the sales tax on "sales of electricity or electrical current, water and gas[.]" Section 144.605(11) defines "tangible personal property" for purposes of the Missouri use tax law as "all items subject to the Missouri sales tax as provided in subdivisions (1) and (3) of section 144.020[.]" Thus, electricity and electrical current are defined to be tangible personal property. *See also UtiliCorp*, 75 S.W.3d at 728, n.6. By contrast, telephone service is not included in the definition of tangible personal property in Section 144.605(11). Section 144.020.1(4) imposes sales tax on "sales of ***service*** to telephone subscribers and to others through equipment of telephone subscribers for the ***transmission*** of messages and conversations, both local and long distance[.]" Here, the Director is attempting to exclude from exemption the equipment that provides "transmission," even though that function is expressly included as part of the taxable service that is the "product" in this case.

The inter-office trunking facilities are part of Bell's integrated plant. Although the Director claims that Bell does not "directly use" that equipment to manufacture telephone service, she fails to apply the criteria of the integrated plant to this equipment. Bell's network, including the inter-office trunking equipment, is "integrated" and "continuous and indivisible" within the meaning of *Concord*, 916 S.W.2d at 191. In *Floyd Charcoal*, the Court cited *Niagara Mohawk Power Corporation v. Wanamaker*, 144 N.Y.S.2d 458 (1955), and its consideration of the following criteria under the integrated plant doctrine:

> The basic questions are the following: (1) Is the disputed item necessary to production? (2) How close, physically and causally is the disputed item to the finished product? (3) Does the disputed item operate harmonious with the admittedly exempt machinery to make an integrated and synchronized system?

Id. at 178.

Bell meets the criteria of *Niagara Mohawk*. Inter-office trunking equipment is necessary to produce the telephone services; the telephone signals flow through the equipment, so inter-office trunking equipment is both physically and causally close to the finished service. The equipment operates harmoniously with the various switches and other devices, including the telephone handsets, that together create telephone services.

The Director claims that "transmission" is merely an "accompanying 'service' that makes the product more useful, valuable, or marketable" (Dir. Br. 67). This argument reflects a misunderstanding of the telephone network and of the law. Without interoffice trunking facilities, or any transmission facilities, customers would be unable to communicate with persons outside of their own central office areas. Without the interoffice trunking facilities, therefore, there would be no long distance telephone service, no service across town (from callers served by one office to callers served by another office), and, most important from the Director's standpoint, no Missouri sales tax collected on such service by Bell. Furthermore, the Director's argument that "transmission" is merely an "accompanying service" to the sale of a product is defeated by the statutory definition of telephone service under Section 144.020.1(4) as a manufactured product that includes "transmission[.]"

The Director criticizes the Commission's discussion regarding the two-way nature of Bell's telecommunications network. This demonstrates a fundamental misunderstanding of the distinction between the two-way nature of the telephone system and the one-way nature of an electrical system (Dir. Br. 67). As the Commission noted, "Bell's manufactured product is the result of signals that travel back and forth between the calling and called parties, and its final form is shaped both by individual choices that those parties have made about what kind of telephone service they desire and what features they may choose at a particular time." (Finding of Fact 113; Tr2. 27-29).

The Director's claim that, under Bell's rationale, "an electrical utility could avoid the *UtiliCorp* holding by using parallel wires, sending electricity two different directions along the same route" is likewise without basis (Dir. Br. 70). The two-way nature of the network is merely a feature highlighting the key fact that the telephone service is not completed at any one point in the network, rather the taxable services are created by the entire network. Further, the direction the electric current travels on an electric company's power grid would not change the fact that this Court concluded that the manufacturing of electricity ends at the power generator. The electric utility simply cannot continue to manufacture a product that is already complete.

The Director also cites an appeal that she filed with the Eighth Circuit Court of Appeals in the matter of *Missouri Dep't of Revenue v. Digital Teleport, Inc.*, No. 04-3250 (8th Cir. Filed Sept. 13, 2004) (Dir. Br. 69-70). There, the Director appealed an adverse ruling of the United States Bankruptcy Court involving substantial assessments of tax on the bankrupt's purchases of telephone equipment. Under the authority of *Bell*, the Bankruptcy Court disallowed all but a tiny fraction of the Director's claim since the bankrupt party's network transformed and regenerated telephone signals. It is notable that on May 5, 2005, after the Director filed her

brief in this case, she dismissed her appeal in the Eighth Circuit. This fact is reflected in the attached docket sheet entry (Bell. App. A.2-4).

Granting the Manufacturing Exemptions to Bell on its purchases of the inter-office trunking equipment is not only supported by the facts and the law, it is supported by the purpose of the Manufacturing Exemptions and within the reasonable expectations of the Missouri General Assembly. During the second quarter of 1992, Bell sold approximately $186,000,000 in taxable telephone service on which it remitted $11,011,655.45 in Missouri sales tax. That meets the goal of the exemption to generate taxable sales. *International Business Machines Corporation v. Director of Revenue*, 958 S.W.2d 544 (Mo. banc 1997). Granting the exemption serves another goal: it prevents the pyramiding of sale taxes inherent when tax is imposed on the machinery and equipment used to produce products that, in turn, are taxable. *Floyd Charcoal Company, Inc. v. Director of Revenue*, 599 S.W.2d 173, 177 (Mo. banc 1980). Finally, Bells submits that the General Assembly reasonably expected taxable service manufacturers to qualify for the Manufacturing Exemptions when it incorporated, and even expanded, this Court's definition of manufactured "product" to include taxable services. Section 144.010.1(14), RSMo 2000.

For all of the foregoing reasons, *UtiliCorp* does not apply to this case. Bell's inter-office trunking equipment qualifies for exemption.

D. Bell's Pay Phone Components Are Part of the Integrated Plant

Under her Point B (Dir. Br. 59-62), the Director challenges Purchases upon which Bell paid tax in the approximate amount of $250.[11] The Director challenges the Commission's

[11] Exhibit 44, Account Number 188C, lines 83-96, column G.

conclusion that certain pay telephone components, particularly shelving and signage, were used directly in manufacturing pay telephone services (Dir. Br. 59-62). She focuses on the Commission's observation that pay phone components "are not absolutely essential to the provision of telephone service, and are not closely connected to those portions of the system that actually effect a change in signals" (App. A.69).

The Director fails to read the Commission's language in context and ignores the Commission's express reliance upon *Noranda Aluminum, Inc. v. Department of Revenue*, 599 S.W.2d 1 (Mo. 1980), in making its decision in this regard. In *Noranda*, the taxpayer sought exemption for bus-guards to prevent spillage of molten aluminum to prevent personal and property damage to laboratory equipment used for testing the taxpayer's product and to monitor the efficiency of the product. The Director argued, as she does here, that the Manufacturing Exemptions should not apply because the manufacture of the taxpayer's product could be completed without this equipment. This Court rejected the Director's argument, holding that the bus-guards were integral to the manufacturing process, and, thereby, were directly used in manufacturing such that they qualified for the Manufacturing Exemption. The Commission correctly followed *Noranda*.

The Director instead cites *Floyd Charcoal v. Director of Revenue*, 599 S.W.2d 173 (Mo. 1980). This Court decided *Floyd Charcoal*, however, ***on the same day*** it decided *Noranda*. If the Director's argument were correct, *Noranda* misapplied *Floyd Charcoal*. Furthermore, as the Commission noted (App. A.64), *Floyd Charcoal* does not support the Director. *Floyd* recognizes a broader approach to manufacturing:

> Such an approach is consistent with the …legislative intent behind the exemption. Modern manufacturing facilities are designed to operate on

> an integrated basis, evidenced by the installation involved in this case. To limit the exemption to those items of machinery or equipment which produce a change in the composition of the raw materials involved in the manufacturing process would ignore the essential contribution of the devices required for such operation. *Id.* 599 S.W.2d at 178.

Likewise, *Concord Publishing House v. Director of Revenue*, 916 S.W.2d 186, 192 (Mo. banc 1996), supports exemption. This Court held there that laptop computers used by reporters constituted exempt equipment under the Manufacturing Exemptions, even though the computers were not used to physically print the newspaper:

> By holding the computers are used in manufacturing a newspaper, we also find that they are directly used in manufacturing because they are an integral part of the publication process. The computers are essential to the printing of the paper as the printing presses themselves. A more limited view of the process would arguably exclude the most important step in manufacturing a newspaper, the composition and editing of its contents.

In the present case, the pay telephones' shelving and signage meet any reasonable integrated plant standard. Because pay telephones are located in public places, more is required to effectively provide the services that customers need. First, customers need to know where these pay telephones are located. Second, customers may need enclosures around the telephones in order to have private conversations. Last, customers need the use of shelving on which to use a telephone directory, or on which to take notes during a call. The shelving and

signage "are an integral part of producing" pay telephone service because they notify customers where the pay phones are located and allow customers effectively to use them.

In short, Bell's Purchases relating to pay telephone service are directly used in manufacturing basic and vertical telephone services and are appropriately included as part of Bell's integrated manufacturing plant.

CONCLUSION

Based on the foregoing, this Court should affirm the Commission's decision.

Respectfully submitted,

BRYAN CAVE LLP

Ann K. Covington, #26619
B. Derek Rose, #44447
One Metropolitan Square
211 North Broadway, Suite 3600
St. Louis, Missouri 63102
Telephone: (314) 259-2000
Facsimile: (314) 259-2020

Edward F. Downey, #28826
221 Bolivar Street, Suite 101
Jefferson City, Missouri 65101
Telephone: (573) 556-6622
Facsimile: (573) 556-6620
Attorneys for Appellant

CERTIFICATE OF SERVICE

I hereby certify that two true and accurate copies of the foregoing, as well as a labeled disk containing the same, were mailed first class, postage prepaid or hand-delivered this 22nd day of June, 2005, to Jim Layton, Assistant Attorney General, Missouri Attorney General's Office, P.O. Box 899, Jefferson City 65102.

I hereby certify that the foregoing brief complies with the limitations contained in Rule 84.06(b), and that the brief contains 16,101 words.

The undersigned further certifies that the disk simultaneously filed with the hard copies of the briefs has been scanned for viruses and is virus-free.

TABLE OF CONTENTS